Abstract

The invention relates to space engineering, mainly to reusable space vehicles (SV) for reentry and descending in a planet atmosphere. The inventive SV consists of a all-body (1) comprising folding wings and/or stabilizers (2, 3) provided with devices (5) for unfolding said wings and/or stabilizers, which are closed by a front removable heat protecting screen (4) in the folded position thereof during the descent of the SV in the atmosphere. Said screen can have an oval shape in the projection on a plane which is perpendicular to the longitudinal axes of the LV. The side surfaces of the rear section of the SV body provided with the wings and/or stabilizers (2, 3) can be closed by separate a panels (not shown). Said panels, in particular form a conical surface. After deceleration, at an initial descent stage, the screen (4) is removed and the wings (stabilizers) are unfolded into operating position thereof by means of the devices (5). Said invention ensures a sufficiently high aerodynamic quality of the SV during the descent thereof and simultaneously protects said SV against aerodynamic and thermal loads during supersonic deceleration. Said result is reached by minimal costs including the SV turnaround servicing costs.